XIV.—Notes on Acari parasitic on Birds, with Descriptions of Two new Species. By STANLEY HIRST.

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Syringophilus columbae, sp. n.

 \Im ?. Body elongated and very narrow. Only two hairs are present at anterior end of scutum, and they are much shorter than in the female or nymphs of *S. bipectinatus*. The other hairs of the *dorsum*, especially those on the hinder end of the scutum, are longer than in *S. bipectinatus*. Straight cellular portion of trachea short, consisting of only four cells. Claws of legs slender; the comb consists of fewer setæ than in *S. bipectinatus*, and the modified hair on the tarsus on each side of the claws is much wider, being scale-like and striated.

Host. Domestic pigeon; inside quill of feathers. Dallas, Texas (Babcock & Wood). Specimens examined through the kindness of Mr. F. C. Bishopp, of the United States Department of Agriculture.

Pterolichus sculpturatus, sp. n.

 \mathcal{S} . Very similar to *P. bicandatus*, but the posterior lobes of the abdomen are not so rounded in outline. Posterior plate of dorsum ornamented with minute rosettes or stars (apparently sometimes raised on very slight granules), whereas in *P. bicaudatus* the punctations are uniformly distributed and do not form rosettes.

Length (including capitulum) 540 μ .

Nymph (second stage). Posterior plate of dorsum very unlike that of *P. bicaudatus*, being almost oblong in shape, except for the posterior margin, which is notched or indented in the middle. Lateral margins practically straight and parallel with one another; the anterior margin is also practically straight. Surface of this plate sculptured with numerous minute rosettes. Posterior end of abdomen with two pairs of long hairs, as in *P. bicaudatus*.

Length (including capitulum) 560 μ .

Host. South African ostrich, Transvaal; a number of examples inside quills of that bird: Onderstepoort (24.4.19);

received through the kindness of Mr. G. A. Bedford, of the Union Veterinary Station.

Pterolichus bicaudatus, Gerv.

Nymph (second stage). Posterior plate of dorsum roughly triangular or elongate heart-shaped in outline, the apex pointing forwards; posterior margin of this plate indented in the middle; its surface is finely and evenly punctated.

Host. South African ostrich. I have examined specimens of this species from Sterkstroom, Cape Colony, and from California.

Liponyssus silviarum, Can. & F.

Dermanyesus silviarum, Canestrini and Fanzago, Atti R. Inst. Venet. 1877-1878, (5) iv. p. 124.

Leiognathus silviarum, Canestrini, Prospett. Acarof. Ital. 1885, i. p. 121. ? Lophoptes patavinus, Mégnin, C. R. Soc. Biol. 1891, iii. Liponyssus canadensis, Banks, Washington, Proc. Ent. Soc. 1909, xi.

p. 134.

This species occurs both on sparrows and poultry in the United States, and this is of some interest, for the species has not hitherto been recorded as a parasite of poultry (unless Mégnin's Lophoptes patavinus is the same species). It differs from the very closely allied species L. bursa principally in having only one pair of long hairs at the extreme posterior end of the dorsal scutum, whereas in L. bursa there are always two quite long pairs of hairs in this position.

Hosts and localities. I have examined specimens from poultry from the following localities :--Harvel and Raymond, Illinois; Lafayette, Indiana; Aberdeen, South Dacota; Beltsville, Maryland; Washington, D.C. It occurs on sparrows in the following localities :- Raymond, Illinois; Aberdeen, South Dacota; Dallas, Texas. In the British Museum there are specimens from Russia found on Motacilla alba, and others from the Zoological Gardens (on European sparrow-hawk and Indian jay).

Liponyssus bursa, Berlese.

Additional localities. Gharbia Province, Lower Egypt; two lots of this species from domestic poultry, collected autumn 1918 by Mr. Aghion. Dallas, Texas; on English sparrow (F. C. Bishopp).

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